IP Video Conferencing Frequently Asked Questions

Is ICN incorporating an Internet Protocol (IP) video conferencing service?

Yes, ICN's IP video conferencing service will be based on H.323 and SIP (Session Initiation Protocol), which was announced to customers in May 2010. H.323 is the industry standard for video conferencing on Internet Protocol (IP) networks. So, whether you are using Polycom, Cisco, LifeSize, etc., equipment or software, you can connect to any other equipment or software that is also using the H.323 standard. The maturity in the H.323 and SIP standards provides robust features, high quality and extensive support.

What upgrades has ICN completed?

- ICN has a new Polycom Multipoint Control Unit (MCU) bridging platform installed. This infrastructure component is required for multipoint conferencing. The MCU also has ISDN (Integrated Services Digital Network) gateway. ISDN is a digital standard for video conferencing over public switched telephone networks.
- ICN is integrating its bridge connections of ISDN to the new Polycom bridging platform. A bridge is used to connect two or more endpoints. Mercy Hospital in Des Moines has been identified as a test pilot opportunity, and is currently working with ICN to test ISDN functionality and quality on the new Polycom bridging platform.
- ICN completed an upgrade to our TCReliance platform, including the addition of Live Conference Manager (LCM). Video schedulers see familiarity and interoperability when scheduling video sessions between ICN's MPEG (Moving Picture Experts Group) and H.323 IP video platforms, and scheduling enhancements were completed in mid-2010. Belle Plaine High School has been testing interoperability of the services since October 2010 with positive results.
- ICN's MPEG video sites and new IP video conferencing sites can be interconnected in a single video session. ICN's TCReliance platform currently manages both types of video devices and networks. For H.323 sessions, there are additional session attributes allowing IP video sites to be bridged together with sessions using open microphones and continuous-presence layout.
- ICN's TCReliance platform manages an upgraded gateway system that interconnects a variety of different video conferencing system types. ICN has offered limited gateway services in the past, but the new gateways will be highly expandable and will remove many limiting factors that exist in video sessions that included a mix of MPEG and IP type video conferencing sites.
- Video conferencing sites traditionally used a Local Node Controller (LNC). This LNC is generally a specialized system that controls conferencing room peripherals and communicates with ICN's Session Control. Session Control provides a conference chairperson with a graphical user interface.

ICN's TCReliance platform upgrades now allow for new LNC designs including a web-based application. Other session control options are also being explored.

As the ICN moves forward, what features will be available?

New state-of-the-art features such as: standard definition and high definition resolution capabilities, integration of multiple video and audio devices into one session, and the ability to expand video conferencing sessions to new site destinations. In addition, there will be multiple-site viewing options to fulfill quad screen requirements, the ability to include computer images in native resolution in the video session, the capability to record and store the session, the capacity to stream the session to desktop viewers, and the ability to include desktop users interactively in the session. In the future, ICN will address features such as recording, streaming, storage, content management, ad hoc conferencing, standard conferencing, mobile clients, desktop clients, and content storage.

Moving forward, what is the ICN's service concept?

ICN's service concept is based on two models: a customer providing the codec or ICN providing the codec for the customer. A codec encodes signals such as camera-video and microphone audio into data packets that are transmitted across a network. The codec also decodes data packets from the network and converts to audio and video signals. At this time, ICN has tested with Polycom and Tandberg codecs. Additional video codec models will be tested as needed. ICN will develop a list of interoperable codecs as we proceed. Within the concepts, there are many components that could offer many options, which would provide flexibility in customer choices to meet needs and budget concerns. Many of those components have been identified and pricing/rates continue to be developed.

Will ICN IP and MPEG equipment be placed in different rooms in my facility?

Yes. With full-motion (MPEG) video sites, all equipment owned by the ICN is located in the video site's FOTS (Fiber Optic Terminal System) room. To take advantage of inherent computer graphic ports on the IP codec and economy of Ethernet cabling, it is recommended that the IP codec be located in the classroom or office participating in the sessions. Additional security measures to protect the codec in the room are also recommended.

Has ICN identified a vendor / manufacturer for equipment?

Yes. ICN has identified Polycom to be the vendor for the core infrastructure for our IP video conferencing service. In May 2011, ICN entered into an Agreement with AVI Systems for on-site, Polycom-branded installation, solution planning, design, training, maintenance and for Polycom products and services. This agreement with AVI Systems for the core equipment does not eliminate other integrators from designing ICN video conferencing sites at your location. Core equipment is anticipated to be installed by the fall 2011, and includes Polycom RMX, VBP, CMA, DMA, and RSS.

When will ICN's IP Video Conference Service be available for my facility?

We currently have three early adopter sites testing the IP video conferencing service.

1. Belle Plaine High School (BPHS) is a pilot site to assist ICN in testing and developing interoperability between our MPEG sites and the new IP video conferencing service. This room incorporates a cart system with a single camera, dual monitors, and an open microphone.

   Additional differences with BPHS video site:

   - Web-based PC interface, login process required.
   - As a remote site a requirement is to perform the "Push-to-Talk" function using the PC interface.
   - The user is required to manually power up the LCD TV monitors
   - The user is required to check / set the volume adjustments
   - Web-based chat to ICN Service Desk.
2. Heartland Area Education Agency in Johnston, Iowa, was selected to be a second participant to join a controlled environment as an early adopter. They will be incorporating a new industry-standard video codec and an existing session control in a new Crestron local node controller.
3. Mercy Hospital is working with ICN to test the ISDN platform on the new Polycom bridging platform.

In the first quarter (Q1) of 2012, ICN will begin its limited market offering (LMO) for customers interested in obtaining ICN's IP video conferencing service. Early adopters and LMO customers may be on the IP video network simultaneously during this testing and migration phase.

By integrating IP, can sites without a dedicated ICN room sign up for sessions?

Yes. Authorized users at locations who do not have a dedicated video conferencing site on ICN's MPEG platform will have the ability to participate in video conferencing sessions from a variety of access options.

ICN's IP video conferencing service meets the needs for the integration and interoperability between MPEG and H.323 platforms.

What options does my organization have with our existing video site?

ICN wants to keep costs affordable while allowing you to use your site in different ways. We are developing options for video cart systems, desktop clients for use with personal computers, laptops with web cameras, or mobile devices, in addition to options for upgrading your existing video site. ICN's IP video conferencing service will provide a cost effective, effortless method for customers to have industry standard, high quality, rich features.

Is ICN providing expertise for video site designs?

ICN does not provide expertise for video site designs; customers may utilize any video classroom integrator. However, each classroom relies on a specialized control system client design that must communicate with the ICN's video application server using a proprietary communications language. AVI Systems and ECS are two video room integrators who have the expertise to ensure that video rooms are ICN compliant and can interoperate with the specialized, proprietary control system of MPEG sites. Although ICN provides the video conferencing service connection, all other video room equipment (i.e., cameras, microphones, LNC, room furnishings) and maintenance agreements, are provided by and owned by the facility. For specific room design you may contact any video classroom integrator, but will need to contact AVI or ECS to ensure interoperation of the classroom with the ICN.

AVI Systems
3001 104th Street
Urbandale, IA 50322
Phone: 515.254.9850
www.avisystems.com

ECS Corporate Office
5665 Tremont Ave
Davenport, IA 52807
Phone: 563.322.1525
www.ecsdav.com

For pricing information, who do I contact?

We are continuing to work on establishing rates for ICN's IP video conferencing service. Pricing should be available by the first quarter (Q1) of 2012. Contact an ICN Account Consultant for updated information by calling 877-426-4692 or e-mailing ICN.CSS@iowa.gov.

For video room equipment pricing, please refer to the integrators listed above, in the previous question.

For additional information, who do I contact?

For more information, contact ICN's VSP team at ICNVSPTeam@iowa.gov.